

Work Order ID 55487

January 19, 2010 1:33:48 PM



Page 1

Item ID: D350-591-122

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, RH

Start Date: 1/19/10 Start Qty: 4.00



Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2351

Rev E

100

0.00



DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy bluefile and type labels as per PPP D350-591-122 CHG005

8/10/02/26

JFH BG 10/03/01

110

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

1-Cut D2244-116 extrusion to 55.32" long as per Dwg D2351 using cutting table
setup DT8185-G 1/2-Drill extrusion per Dwg D2351 using Jig DT8230 for rivets.

10-01-28

5 φ

130

0.00



CNC Bend 1

BENDING MACHINE - SKIDTUBES

Memo


0.00

CNC Delta 100 Bender

Bend as per dwg

10-2-1

PTO

W/O: 53487		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-2-1	130	Bend as per Dwg D 2351-042 using CNC Bender 1 and Falo FTO12. Use bend prog. D 2351-042					S 10/03/04
		perm chg.	E	10.02.01			

Part No: D350-591-122 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

278 10/02/01

5

150

Large Fab

0.00



Large Fab

Memo

0.00

Large Fab

1-Bevel Fwd and Aft end for welding L2-Weld Aft End Bracket per QSI 004 & Dwg D2351 using Welding Jig DT8033(1) A/RAluminum Rod, 7/11/03-13- Do not Grind Flush

10.02.05

5

160

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

PD 10.02.08 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Run Start

Approvals: Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

QC5- Inspect part completeness to step on W/O

0.00

S 10/02/08

QC

Memo

0.00

45
RH

Quality Control

180

Chemical Conversion Coat per QSI005 4.1

0.00

H 10.02.08

HandFinish

Memo

0.00

5

Hand Finishing

190

QC3- Inspect Part Finish

0.00

JL 10/02/08

QC

Memo

0.00

XS

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

200

0.00



Large Fab

0.00

Large Fab

Memo

1-Rivet Leg Assembly as per Dwg D2351

10.02.10

5

φ

210

0.00



QC5-Inspect part completeness to step on W/O

0.00

QC

Memo

Quality Control

N/A

10/02/10

220

0.00



Large Fab

0.00

Large Fab

Memo

1-Weld Fwd End Plate per QSI 004 & Dwg D2351 ☐ A/RAluminum
Rod *1111 311* 2-Grind end plate flush.

10.02.10

5

φ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Reference:

Run Start

Approvals: Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

230

QC9- Inspect visual per QSI004- Fusion Welds ✓

0.00

QC

Memo

0.00

Quality Control

235

10/02/10 QCS

→ 8 10/02/10

250

Chemical Conversion Coat per QSI005 4.1

0.00

HandFinish

Memo

0.00

Hand Finishing

260

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Powdercoat

Memo

0.00

Powder Coating

START TIME: 9:00 AM OVEN TEMPERATURE:
9:30 AM FINISH TIME: 3:20 PM

=) 10/10/27

5 0 BE 10/02/10

25 RH
X5AH

X5RH

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

270



HandFinish
Hand Finishing

10.02.25

~~Pressure Wash per OSI005.4.3~~

Wing Walk Memo

Batch: NL113462

0.00

=> m-k 10/02/25

5X

280



QC
Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

8.10/2/26

45
RH

290



Packaging
Packaging

Pick Kit

Memo

0.00

0.00

10.2.25 SP 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

300

QC4- 100% Inspect kits for completeness

0.00

S 10/02/26



QC

Memo

0.00

Quality Control



310

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D350-591

122 Location: _____ PPP Rev: RE

10/02/20 (5)

320

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/03/02

W 10.02.26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

January 19, 2010 1:33:52 PM

Page 1

Work Order ID: 55487

Parent Item: D350-591-122

Parent Item Name: Heli-Access-Step, RH

Comments: IPP Rev:E: 102.10.21 Re-format; Incorporated D2351-041 IPP KJ/RF

Start Date: 1/19/10

Required Date: 1/25/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS210421.4 Nut		Purchased	No			120	Each	3,709.000	15 12.0000		10-2-25	SP

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST	3709
102552	6
104248	6
110507	184
111827	2513
113422	1000
15924	0

D2244-116

Manufactured No



Step Extrusion

150 Each 31.0000 2.0000

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST	31
38023	31

10-9-29

2.5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Picklist Print

January 19, 2010 1:33:52 PM

Work Order ID: 55487

Parent Item: D350-591-122

Parent Item Name: Heli-Access-Step, RH


Comments: IPP Rev:E 02.10.21 Re-format; Incorporated D2351-041 IPP KJ/RF

Start Date: 1/19/10

Required Date: 1/25/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS20600-AD4W3  Cherry Rivets		Purchased	No			220	Each	2,505.000	64.0000		1/10.02.10	

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST	2505	
102929	37	
104715	10	
<u>106375</u>	490	
107939	1000	
111636	968	

AN3-37A *


Purchased

No

290

Each

705.0000

8.0000

Bolt

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST	705	
105425	205	
<u>111668</u>	500	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 55487



Parent Item: D350-591-122



Parent Item Name: Heli-Access-Step, RH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:E:102.10.211 Re-format; Incorporated D2351-041 IPPLKJ/RF

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN9601210		Purchased	No			290	Each	543.0000	12.0000			
-----------	--	-----------	----	--	--	-----	------	----------	---------	--	--	--



Bolt



10-2-25 sl s

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

543

113359

543

17406

0

51764

0

20

15

NAS1149D0363 PS1 0A

AN9601210

Purchased

No

290

Each

0.0000

16.0000



Washer

AN9601210

Purchased

No

290

Each

149.0000

24.0000



Washer

NAS1149D04631

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

149

112314

149

16941

0

PS1 017 SP

M113288 10-2-25 sl

M113706 10-2-25 sl

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Parent Item: D350-591-122



Parent Item Name: Heli-Access-Step, RH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:E 102.10.21 Re-format; Incorporated D2351-041 IPP KJ/RF

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2230-L		Manufactured	No			290	Each	244.0000	4.0000			

8
Lug



10-2-25 SD SP

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FG	80	
53782	80	
Main Warehouse		
ST	4	
51761	4	
Main Warehouse		
ST476	160	
54755	160	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item Name: Heli-Access-Step, RH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:E 02.10.21 Re-format; Incorporated D2351-041 IPPC/KJ/RF

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2350-3		Manufactured	No			290	Each	157.0000	4.0000			
---------	--	--------------	----	--	--	-----	------	----------	--------	--	--	--



D350 10-2-25 sf (X)

Lug

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

ST	7	
----	---	--

50306	5	
-------	---	--

51568	2	
-------	---	--

Main Warehouse

ST176	99	
-------	----	--

53881	99	
-------	----	--

Main Warehouse

ST476	51	
-------	----	--

53781	51	
-------	----	--

D2582		Manufactured	No			290	Each	40.0000	4.0000			
-------	--	--------------	----	--	--	-----	------	---------	--------	--	--	--



10.02.

Step Leg Assembly

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

ST	40	
----	----	--

47644	3	
-------	---	--

48090	10	
-------	----	--

51343	16	
-------	----	--

53634	11	
-------	----	--

3
2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item Name: Heli-Access-Step, RH



Comments: IPP Rev: E102.10.21 Re-format; Incorporated D2351-041 IPP KJ/RF

Start Date: 1/19/10

Required Date: 1/25/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2673-34		Manufactured	No			290	Each	27.0000	4.0000			
												
End Plate												

Handwritten: 10.02.09

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 27

54361 27

D2850-2		Manufactured	No			290	Each	15.0000	4.0000			
												
End Cap												

5

Handwritten: 10.02.09



Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 15

31409 5

47114 10

<i>86</i> D2856-400 <i>7.20" →</i> <i>meas 870/14/26</i>		Manufactured	No			290	f	290.3921	2.4000			
												
Abraison Strip												

5

Handwritten: 10.2.25 SD (54)

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST403 290.3920842

50593 141.312084

52563 149.08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Comments: IPP Rev:EL02.10.21 Re-format; Incorporated D2351-041 IPP:KJ/RF

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Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D232-020 X2 Nut		Purchased	No			290	Each	3,083.000	8.0000			

Warehouse Location

Main Warehouse

Loc	Qty
ST	3083
110844	35
111274	27
111668	52
112314	471
112385	498
113523	300
113537	700
113644	1000

D232-020 X2 @ 3.0" 2.5 feet
Rubber Cushion

D232-020 X2 @ 3.0" 2.5 feet Rubber Cushion		Manufactured	No			290	Each	0.0000	8.0000			
---	--	--------------	----	--	--	-----	------	--------	--------	--	--	--

D232-020 X2 @ 3.0" 2.5 feet Bolt		Purchased	No			290	Each	112.0000	8.0000			
-------------------------------------	--	-----------	----	--	--	-----	------	----------	--------	--	--	--

Warehouse Location

Main Warehouse

Loc	Qty
ST	112
112969	110
18949	2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN KE	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2351	REV. E SHEET 1 OF 2
DATE 05.11.14		TITLE HIGH FLOAT STEP ASSEMBLY	SCALE NTS
A	95.02.15	NEW ISSUE	
B	97.05.22	END CAPS CHANGED	
C	97.07.23	ADDED BUSHING AND FACING INFO	
D	98.12.17	CHANGED TO BEND, D2850 REPLACES D2357 & D2358, INCORP. DEO 9084	
E	05.11.14	UPDATE FINISHING NOTE	

D2351 HIGH FLOAT STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY -041	QTY -042
D2351-041	High Float Step Assembly (LH)	X	
D2351-042	High Float Step Assembly (RH)		X
D2244-55.4	STEP EXTRUSION*	1	1
D2582	STEP LEG ASSEMBLY	1	1
D2673-34	STEP END PLATE	1	1
D2850-1	END BRACKET	1	
D2850-2	END BRACKET		1
MS20600AD4W3	RIVETS	16	16

*cut per drawing

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 53487

BP 10-119

RELEASED
05.11.28 *#*

PH
ECN 1105

UNDER REVIEW

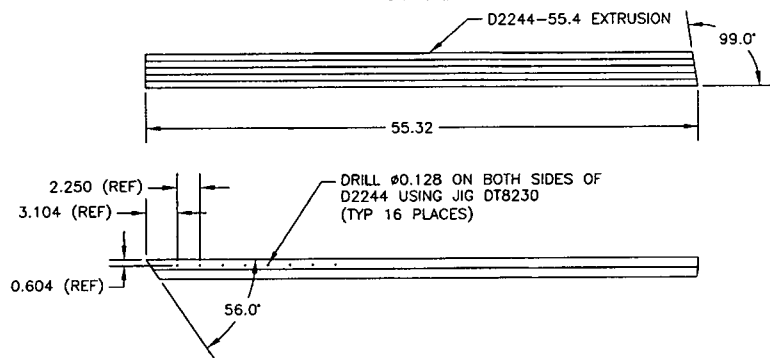
07.11.29
PER NCR # 263

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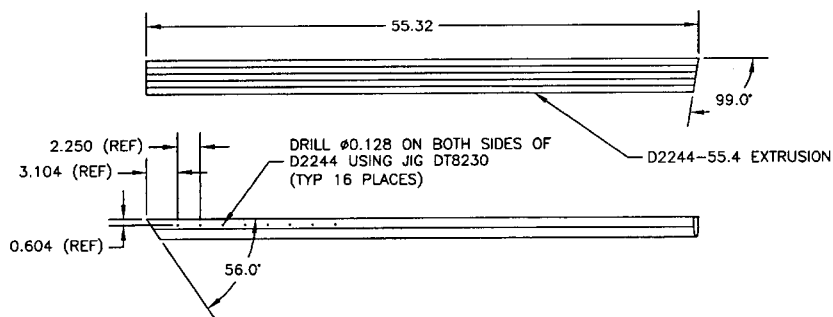
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11055487

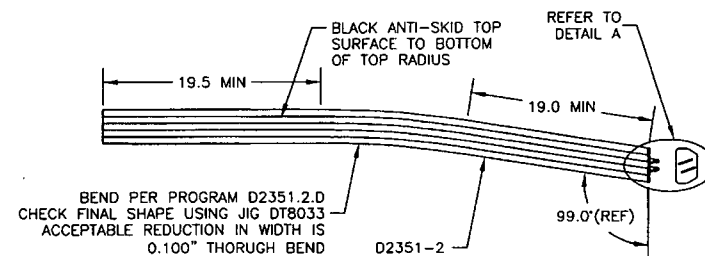
D2351-2 CUTTING/DRILLING DETAIL
RIGHT STEP



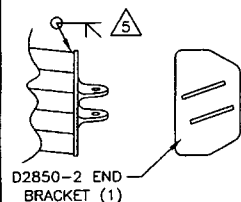
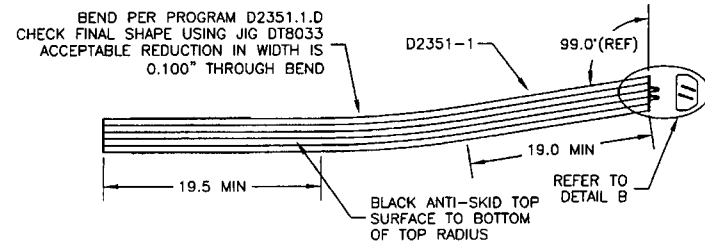
D2351-1 CUTTING/DRILLING DETAIL
LEFT STEP



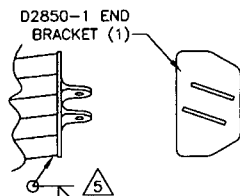
D2351-042 BENDING/ASSEMBLY DETAIL
RIGHT STEP



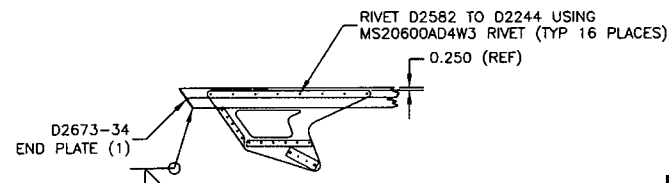
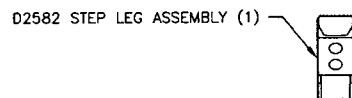
D2351-041 BENDING/ASSEMBLY DETAIL
LEFT STEP



DETAIL A
SCALE: 1:4



DETAIL B
SCALE: 1:4



GENERAL NOTES

- 1) WELD PER DART QSI 004
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

CHAMFER D2244 EXTRUSION 0.075"x45° BEFORE WELDING D2850-1 OR D2850-2 IN PLACE. DO NOT GRIND FLUSH.

RELEASED
05.11.28

UNDER REVIEW

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DESIGN KE	DRAWN BY PH	DART	DART AEROSPACE LTD. WILKESBORO, ONTARIO, CANADA
CHECKED #	APPROVED #	DRAWING NO. D2351	REV. E SHEET 2 OF 2
DATE 05.11.14		TITLE HIGH FLOAT STEP ASSEMBLY	SCALE 1:12

REFERENCE ONLY

5. PARTS LIST

Qty -111A	Qty -113	Qty -115	Qty -117A	Qty -119	Qty -133	Part Number	Description
X						D350-591-111A	<i>Heli-Access-Step</i> ™, Long Step – High Skid
	X					D350-591-113	<i>Heli-Access-Step</i> ™, Short Step – High Skid
		X				D350-591-115	<i>Heli-Access-Step</i> ™, Short Step – Low Skid
			X			D350-591-117A	<i>Heli-Access-Step</i> ™, Pre-Flight Step
				X		D350-591-119	<i>Heli-Access-Step</i> ™, Long Step – Low Skid
					X	D350-591-133	<i>Heli-Access-Step</i> ™, Aft Maintenance Step
	1					D2310	STEP ASSEMBLY (HIGH-SHORT)
1						D2311	STEP ASSEMBLY (HIGH-LONG)
		1				D2354	STEP ASSEMBLY (LOW-SHORT)
				1		D2355	STEP ASSEMBLY (LOW-LONG)
					1	D2946-041	STEP ASSEMBLY (MAINTENANCE)
4	2	2	2	2		D2171	CLAMP
4	2	2	2	2		D2182B035	CUSHION
					4	D2230-1	MOUNTING LUG
					4	D2230-3	MOUNTING LUG
8	4	4	4	4		D2274	RADIUS BLOCK
			1			D2362-041	SUPPORT BRACKET
2	1			1		D2362-3	SUPPORT BRACKET
		1				D2362-5	SUPPORT BRACKET
2	1	1	1	1	2	D2856-400-720	ABRASION STRIP
					1	D2945	MOUNTING PLATE
2	2	2		2		AN3-37A	BOLT
					2	AN4-7A	BOLT
					4	AN4-11A	BOLT
					8	AN4-14A	BOLT
		4				AN4-16A	BOLT
8	4			4		AN4-20A	BOLT
1	1	1	4	1		AN4-22A	BOLT
4	4	4	4	4		AN960JD10	WASHER
10	6	2	4	6	14	AN960JD416	WASHER
		4				AN960JD416L	WASHER
2	2	2		2		MS21042L3	NUT
9	5	5	4	5	14	MS21042L4	NUT

Qty -121	Qty -122	Qty -123	Qty -124	Part Number	Description
X				D350-591-121	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
	X			D350-591-122	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
		X		D350-591-123	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
			X	D350-591-124	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
1				D2351-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1			D2351-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1		D2356-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1	D2356-042	STEP ASSEMBLY (LOW-SHORT, RH)
1	1	1	1	D2230-1	MOUNTING LUG
1	1	1	1	D2230-3	MOUNTING LUG
1	1	1	1	D2856-400-720	ABRASION STRIP
2	2	2	2	AN3-37A	BOLT
3	3	3	3	AN4-13A	BOLT
4	4	4	4	AN960JD10	WASHER
6	6	6	6	AN960JD416	WASHER
2	2	2	2	MS21042L3	NUT
3	3	3	3	MS21042L4	NUT

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Revision: G

Date: 08.10.06

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND

INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-6

REF FAA STC: SH967NE

For D350-591-121/-122/-123/-124/-133 steps, customers have the option of installing D2732-030 cushions under the D2230-1/-3 clamps to accommodate varying crosstube diameters and to improve fit. It is also acceptable to use longer or shorter AN4 bolts, and/or extra AN960JD416 washers under the nut to ensure 1.5 to 4 threads in safety. See Figure 1 on sheet 2 of this service instruction for reference.

For D350-591-121/-122 steps at CHG 005, D350-591-123/-124 steps at CHG 004, and D350-591-133 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -121	Qty -122	Qty -123	Qty -124	Qty -133	Part Number	Description
X					D350-591-121	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
	X				D350-591-122	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
		X			D350-591-123	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
			X		D350-591-124	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
				X	D350-591-133	<i>Heli-Access-Step</i> ™, Aft Maintenance Step
2	2	2	2	8	D2732-030	CUSHION
2	2	2	2	8	AN4-16A	BOLT

The DSI-9459-011 kit is available for customers with earlier model D350-591-121/-122/-123/-124 steps. Longer AN4 bolts are provided to fasten the clamps. The DSI-9459-013 kit is available for customers with earlier model D350-591-133 steps.

Qty -011	Qty -013	Part Number	Description
X		DSI-9459-011	Rubber Cushion Kit (for -121/-122/-123/-124 steps)
	X	DSI-9459-013	Rubber Cushion Kit (for -133 steps)
2	8	D2732-030	CUSHION
2	8	AN4-16A	BOLT

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 09.06.24
CERT. NO.: SH92-6
ISSUE NO.: 11

B	AN4-16A WAS -17A FOR -013/-133 KIT	CP	09.06.24
A	NEW ISSUE	CP	09.04.17
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>g2</i>	DART AEROSPACE LTD	
DRAWN	<i>g2</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>g2</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>N/A</i>	DSI 9459	SHEET 1 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	OPTIONAL CLAMP MODIFICATIONS NTS	
DATE	09.06.24	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries